

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

07/23/2003

James Hao Wagner, Murabito & Hao LLP Two N. Market Street 3rd Floor San Jose, CA 95113 EXAMINER

KOBERT, RUSSELL MARC

ART UNIT

CLASS-SUBCLASS

2829

324-158100

DATE MAILED: 07/23/2003.

APPLICATION NO.	FILING DATE	FIRST VALUE OF THE		
10/057,134	01/24/2002	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	01/24/2002	Toshihiro Nomura	M-12376 US	1930

TITLE OF INVENTION: COMPARATOR CIRCUIT FOR DIFFERENTIAL SWING COMPARISON AND COMMON-MODE VOLTAGE COMPARISON

APPLN, TYPE					
	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	6200	<u> </u>	DATE DUE
	- · -	Ψ1300	\$300	\$1600	10/23/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

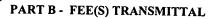
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.





Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents

Alexandria, Virginia 22313-1450 (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE re as or

maintenance fee notification	S.		s and notification of maintenance pecifying a new correspondence ac	fees will be mailed to the curren ddress; and/or (b) indicating a sep	should be completed when t correspondence address a parate "FEE ADDRESS" for
James Hao	90 07/23/200		Fee(s) Transr	cate of mailing can only be used for nittal. This certificate cannot papers. Each additional paper, g, must have its own certificate of r	be used for any other
Wagner, Murabito Two N. Market Stre 3rd Floor San Jose, CA 95113	eet		I hereby certif United States F envelone addre	Certificate of Mailing or Tran fy that this Fee(s) Transmittal is Postal Service with sufficient postal essed to the Box Issue Fee address the USPTO, on the date indicated by	smission being deposited with the ge for first class mail in an
					(Depositor's name
			· .		(Signature
					(Date
APPLICATION NO.	FILING DATE	FIRS	ST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,134 TITLE OF INVENTION: CO	01/24/2002 OMPARATOR CIRCUIT	FOR DIFFERENTIAL S	Toshihiro Nomura SWING COMPARISON AND CO	M-12376 US MMON-MODE VOLTAGE COM	1930 MPARISON
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL EEE(E) DUE	
nonprovisional	NO	\$1300	\$300	TOTAL FEE(S) DUE \$1600	10/23/2003
EXAMIN	CD T	(D. W.)		\$1000	10/23/2003
KOBERT, RUSSI		ART UNIT	CLASS-SUBCLASS	,	
1. Change of correspondence			324-158100		•
CFR 1.363). Change of corresponden Address form PTO/SB/122 "Fee Address" indication PTO/SB/47; Rev 03-02 or Number is required. 3. ASSIGNEE NAME AND FPLEASE NOTE: Unless an been previously submitted to (A) NAME OF ASSIGNEE	n (or "Fee Address" Indi- more recent) attached. U	BE PRINTED ON THE low, no assignee data wil submitted under separate	2. For printing on the patent fro the names of up to 3 registered or agents OR, alternatively, (2) single firm (having as a memb attorney or agent) and the name registered patent attorneys or age is listed, no name will be printed. PATENT (print or type) If appear on the patent, Inclusion of cover, Completion of this form is Name of the patent of t	patent attorneys the name of a per a registered nes of up to 2 ents. If no name f assignee data is only appropriate OUT a substitute for filing an assign	when an assignment has
Please check the appropriate a: 4a. The following fee(s) are en Issue Fee Publication Fee Advance Order - # of Cop	closed:	4b. Payr □ A che □ Paym □ The C	on the patent) individual nent of Fee(s): ck in the amount of the fee(s) is endent by credit card. Form PTO-2038 commissioner is hereby authorized laccount Number	is attached.	edit any overnavment to
Commissioner for Patents is re	quested to apply the Issu		(if any) or to re-apply any previou	usly paid issue fee to the application	n identified above
Authorized Signature)		(Date)			a racinifica above.
NOTE; The Issue Fee and P other than the applicant; a r interest as shown by the recor	ds of the United States F	atent and Trademork Off	other party in		
This collection of information obtain or retain a benefit by application. Confidentiality is estimated to take 12 minutes completed application form t case. Any comments on the suggestions for reducing this Patent and Trademark Offi 22313-1450. DO NOT SEND TO: Commissioner for Under the Paperwork Reduccollection of information unless	n is required by 37 CFI the public which is to governed by 35 U.S.C. to complete, including g o the USPTO. Time w amount of time you burden, should be sent ice, U.S. Department D FEES OR COMPLE Patents, Alexandria, Vir	R 1.311. The information file (and by the USPTO 122 and 37 CFR 1.14. The pathering, preparing, and ill vary depending upon require to complete this to the Chief Information of Commerce, Alexand TED FORMS TO THIS ginia 22313-1450.	is required to to process) an is collection is submitting the the individual form and/or Officer, U.S. dria, Virginia S ADDRESS.		



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. 801 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,134	01/24/2002	Toshihiro Nomura	M-12376 US	1930
75	90 07/23/2003		EXAMINI	ER
James Hao Wagner, Murabito	& Hao LLP		KOBERT, RUSSI	ELL MARC
Two N. Market Stre 3rd Floor	eet		ART UNIT	PAPER NUMBER
San Jose, CA 95113	3		2829	· · · · · · · · · · · · · · · · · · ·
			DATE MAILED: 07/23/2003	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 121 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 121 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONTRACTOR
10/057,134 01/24/20	01/04/0000		ATTORNET BOCKET NO.	CONFIRMATION NO.
	01/24/2002	72 Toshihiro Nomura	M-12376 US	1930
759	90 07/23/2003		EXAMINE	ER
James Hao			KOBERT, RUSSI	ELL MARC
Wagner, Murabito &	& Hao LLP		ROBERT, RUSSI	ELL MARC
Two N. Market Stre	eet		ART UNIT	PAPER NUMBER
3rd Floor				THERTOMBER
San Jose, CA 95113	,		2829	
UNITED STATES			DATE MAILED: 07/23/2003	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
. Notice of Alleger Lift	10/057,134	NOMURA, TOSHIHIRO
Notice of Allowability	Examiner	Art Unit
	Russell M Kobert	2829
		<u> </u>
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this apport of the appropriate communication GHTS. This application is subject to	plication. If not included
1. This communication is responsive to the Application filed of	n January 24 2002	
2. A The allowed claim(s) is/are 1-17.	111 Sanuary 24, 2002.	
3. The drawings filed on are accepted by the Examine	г.	
Acknowledgment is made of a claim for foreign priority unc a) ☐ All b) ☐ Some* c) ☐ None of the:		
 ☐ Certified copies of the priority documents have 	been received.	
2. Certified copies of the priority documents have		·
 Copies of the certified copies of the priority doe 		
International Bureau (PCT Rule 17.2(a)).		•
* Certified copies not received:		
5. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. § 119(e) (to a provision	onal application).
(a) The translation of the foreign language provisional a		
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. §§ 120 and/or 121.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of t	this communication to file a reply co	mplying with the requirements noted ITH PERIOD IS NOT EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which gives reason	itted. Note the attached EXAMINER on(s) why the oath or declaration is a	'S AMENDMENT or NOTICE OF deficient.
8. X CORRECTED DRAWINGS must be submitted.		
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached
1) ⊠ hereto or 2) ☐ to Paper No	·	,
(b) \square including changes required by the proposed drawing c	orrection filed, which has be	en approved by the Examiner.
(c) ☐ including changes required by the attached Examiner's	Amendment / Comment or in the C	office action of Paper No
Identifying indicia such as the application number (see 37 CFR 1.6 each sheet.		
9. DEPOSIT OF and/or INFORMATION about the depos attached Examiner's comment regarding REQUIREMENT FOR THE	it of BIOLOGICAL MATERIAL m HE DEPOSIT OF BIOLOGICAL MAT	nust be submitted. Note the TERIAL.
Attachment(s)		
 1⊠ Notice of References Cited (PTO-892) 3⊠ Notice of Draftperson's Patent Drawing Review (PTO-948) 5□ Information Disclosure Statements (PTO-1449), Paper No. 7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4☐ Interview Summa 6☐ Examiner's Amen	Patent Application (PTO-152) ry (PTO-413), Paper No dment/Comment nent of Reasons for Allowance

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Application/Control Number: 10/057,134

Art Unit: 2829

Reasons For Allowance

1. The following is an examiner's statement of reasons for allowance:

An apparatus and methods for testing a circuit wherein first and second test voltages in combination with first and second reference voltages to produce first and second test signals in combination with first and second reference signals respectfully and further switchably combining the first test signal with one of the second reference signal and the second test signal to form a first combined signal and switchable combining the first reference signal with one of the second reference signal and the second test signal to form a second combined signal wherein the first and second combined signals are compared as described in claims 1, 10 and 17, have not been found. It is further noted that the examiner's reasons are understood to be predicated upon consideration of each of the claims as a whole, and not upon any specific elements of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bishop (6281699), Vadipour (6300804), Creek (6323694) and Valdipour

(6392448) show integrated comparator circuits widely used for pin electronics in

automatic test equipment (ATE).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Russell Kobert whose telephone number is (703) 308-

5222.

Any inquiry of a general nature or relating to the status of this application should

be directed to the Group receptionist whose telephone number js (703) 308-0956.

Russell M. Kobert

Patent Examiner
Group Art Unit 2829

July 17, 2003

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800